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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,355	03/27/2001	Masanao Suzuki	FUSA 18.501	1188

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EXAMINER

LERNER, MARTIN

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 08/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,355

Applicant(s)

SUZUKI ET AL.

Examiner

Martin Lerner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 to 22 is/are pending in the application.
- 4a) Of the above claim(s) 2 to 15 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 to 22 is/are allowed.
- 6) ☒ Claim(s) 1 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicants' election without traverse of Group I, Claims 1 and 16 to 22 in the reply filed on 07 July 2005 is acknowledged.

Claims 2 to 15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 07 July 2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Morrison* in view of *Su et al.*

Morrison discloses a digital data transcoder, comprising:

"code separating means for separating, from the [voice] code based upon the first encoding method, codes of a plurality of components necessary to reconstruct a [voice] signal" – transcoder 200 comprises a decoder 204, which includes a demultiplexer 10 which decodes the received video signal encoded according to MPEG-

1 ("the first encoding method") and demultiplexes the motion vectors from the signal (column 7, lines 1 to 13: Figure 2);

"dequantizers for dequantizing the codes of each of the components and outputting dequantized values" – the decoded signal is then passed to an inverse quantizer 12, which restores the levels of the decoded signal and then to an inverse DCT transformer 14 that restores the values of the decoded signals (column 7, lines 13 to 17: Figure 2);

"quantizers for quantizing the dequantized values, which are output from respective ones of said dequantizers, by the second [voice] encoding method to generate codes" – the uncompressed regular video signal 19 is input to an H.261 encoder, which comprises an encoder section 206 having a DCT processor 22 and a quantiser 23 (column 7, lines 30 to 34: Figure 4); quantiser 23 quantises the video signal according to an H.261 encoding standard ("the second encoding method");

"means for multiplexing the codes output from respective one of said quantizers and outputting [voice] code based upon the second [voice] encoding method" – multiplexer 24 multiplexes the video signal for transmission (column 7, lines 30 to 34: Figure 2).

The only element omitted by *Morrison* is that the code of the first encoding method and the second encoding method is a voice code for first and second voice encoding methods. *Morrison* discloses only that the code and encoding methods are for video encoding, and although video encoding generally includes an audio component for voice encoding, *Morrison* does not expressly suggest an application to

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encoding a voice code signal. However, *Su et al.* teaches conference bridge processing of speech in a packet network environment, where conference bridge 200 includes a decoder 230 and an encoder 232 for extracting parameters from multiple channels encoded by a variety of speech standards, and re-encoding the resulting speech samples for transmission back to participants. (Column 2, Lines 10 to 25; Column 4, Line 8 to Column 5, Line 11: Figure 2) The objective is to provide a practical packet-based conference bridge capable of handling speech channels that have been encoded by different techniques. (Column 4, Lines 19 to 28) It would have been obvious to one having ordinary skill in the art to apply the digital data transcoder of *Morrison* to a voice code for transcoding speech from a first voice encoding method to a second voice encoding method as taught by *Su et al.* for the purpose of providing a practical packet-based conference bridge capable of handling speech channels that have been encoded by different techniques.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Morrison* in view of *Baggen*.

Morrison discloses a digital data transcoder, comprising:

"code separating means for separating codes of a plurality of components necessary to reconstruct a[n acoustic] signal from the [acoustic] code that is based upon the first [acoustic] encoding method" – transcoder 200 comprises a decoder 204, which includes a demultiplexer 10 which decodes the received video signal encoded

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according to MPEG-1 ("the first encoding method") and demultiplexes the motion vectors from the signal (column 7, lines 1 to 13: Figure 2);

"dequantizers for dequantizing the separated codes and outputting dequantized values" – the decoded signal is then passed to an inverse quantizer 12, which restores the levels of the decoded signal and then to an inverse DCT transformer 14 that restores the values of the decoded signals (column 7, lines 13 to 17: Figure 2);

"quantizers for quantizing the dequantized values, which are output from respective ones of said dequantizers, by the second acoustic encoding method to generate codes" – the uncompressed regular video signal 19 is input to an H.261 encoder, which comprises an encoder section 206 having a DCT processor 22 and a quantiser 23 (column 7, lines 30 to 34: Figure 4); quantiser 23 quantises the video signal according to an H.261 encoding standard ("the second encoding method");

"means for multiplexing the codes output from respective ones of said quantizers and outputting a[n acoustic] code that is based upon the second [acoustic] encoding method" – multiplexer 24 multiplexes the video signal for transmission (column 7, lines 30 to 34: Figure 2).

Morrison does not expressly disclose that the first encoding method and the second encoding method are "acoustic" encoding methods, that the code is an "acoustic" code, and that the signal is an "acoustic" signal. However, *Morrison* discloses that the code and encoding methods are for video encoding, and video encoding generally includes an audio component for audio encoding. Also, *Morrison* omits: "code correction means for inputting the separated codes to said quantizers if a

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transmission-path error has not occurred, and inputting codes, which are obtained by applying error concealment processing to the separated codes, to said quantizers if a transmission-path error has occurred.” *Baggen* teaches a transmission system with an adaptive channel encoder and decoder for encoding speech. Speech is an “acoustic” signal, so “acoustic” encoding methods, “acoustic” code, and an “acoustic” signal are involved. If a transcoder and rate adapter unit (TRAU) 2 receives a bad frame indicator (BFI) signal from channel decoder 44 indicating the detecting of a CRC error, then speech decoder 48 is arranged for deriving a speech signal based on the previously received signal corresponding to the previous frame, or for performing more advanced error concealment procedures. (Column 8, Lines 29 to 46: Figure 1) Implicitly, if a bad frame indicator (BFI) signal is not received, then speech is decoded and encoded without error correction based upon a previous frame. A bad frame indicator (BFI) corresponds to detection of a transmission-path error. Thus, *Baggen* suggests “applying error concealment processing . . . if a transmission-path error has occurred” and inputting codes “if a transmission-path error has not occurred”. The objective is to provide a receiver with information about the quality of a signal so as to be able to decode a signal and prevent a loss of transmission capacity. (Column 1, Lines 41 to 55; Column 2, Lines 1 to 36) It would have been obvious to one having ordinary skill in the art to apply an error correction method of *Baggen* to a transcoder of *Morrison* for the purpose of providing a receiver with information about the quality of a signal so as to prevent a loss of transmission capacity.

Allowable Subject Matter

Claims 17 to 22 are allowed.

Response to Arguments

Applicant's arguments filed 22 February 2005 with respect to independent claim 16 have been considered but are moot in view of the new grounds of rejection, as necessitated by amendment.

Applicants' arguments filed 22 February 2005 with respect to independent claim 1 have been fully considered but they are not persuasive.

Applicants argue that the claimed invention converts an encoded voice signal by a first voice encoding method to an encoded voice signal by a second voice encoding method without converting the encoded voice signal by the first encoding method to a sound signal. Applicants maintain that *Morrison* converts a received video signal encoded according to MPEG-1 to an uncompressed video signal 19 by decoder 204, and then encodes and compresses the uncompressed video signal 19 based upon the H.261 recommendation by an encoder 206. This argument is not persuasive.

Applicants' invention does not expressly claim a transcoder that converts between first and second encoding methods without converting the encoded voice signal to a sound signal. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Moreover, Applicants' Specification, as originally filed, does not provide any express support for claim language directed to first and second encoding methods for transcoding "without converting the encoded voice signal to a sound signal." Applicants' Specification, as illustrated by the embodiments of Figures 1 to 3, show transcoding by separating LSP, pitch, algebraic, and gain codes. However, one having ordinary skill in the art could conclude that a sound signal is represented by LSP, pitch, algebraic, and gain codes. LSP, pitch, algebraic, and gain codes could reasonably be stated to be parameters of a voice signal or a sound signal. Thus, even if Applicants' claims expressly set forth the limitation of "without converting the encoded voice signal to a sound signal", then issues of new matter would be presented.

Finally, *Su et al.* suggests a conference bridge for transcoding between speech coding techniques producing speech parameters without converting to a voice or audio signal *per se*. (Column 6, Lines 16 to Column 7, Line 37) Thus, even if Applicants' claims expressly set forth the limitation of "without converting the encoded voice signal to a sound signal", then *Su et al.* would suggest that feature.

Therefore, the rejections of Claim 1 under 35 U.S.C. §103(a) as being unpatentable over *Morrison* in view of *Su et al.*, and of Claim 16 under 35 U.S.C. §103(a) as being unpatentable over *Morrison* in view of *Baggen*, are proper.

Conclusion

Applicants' amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

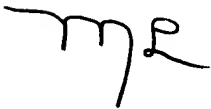
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§ 706.07(a). Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (571) 272-7608. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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8/12/05



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